

WHAT IS CLAIMED:

1. A computer system comprising:

at least one client computer;

at least one host computer, the client computer and host computer utilizing a

5 common physical disk storage medium, the physical storage medium storing an operating system for booting the client; and

first software stored on said client for causing said client, upon initialization, to load said operating system, boot said client, and cause said client to direct requests for disk access through said host computer.

10 2. The computer system of claim 1 wherein said first software causes said client to load a driver onto said client, and wherein said driver directs requests for disk access from said client through said host.

15 3. The computer system of claim 2 wherein said first software comprises code stored in nonvolatile storage for causing a loader to load from said storage medium onto said client, and wherein said loader then causes said at least one driver to load onto said client.

4. The system of claim 2 wherein said physical storage medium is divided into plural sections, each sections being associated with and utilized by a different client computer.

20 5. The system of claim 2 wherein said host computer comprises a drive configuration program for allocating sections of said physical storage medium to each store an operating system for use by a separate client computer.

6. The system of claim 3 wherein the configuration program also restricts and manages access to the storage medium.

7. A method of booting a diskless computer comprising the steps of:

storing, in memory of said diskless computer, code sufficient to redirect a command to load an operating system loader to a physical storage medium of a second computer; and

5 upon initialization, executing said stored code in order to obtain an operating system loader from said storage medium.

8. The method of claim 7 further comprising the step of loading drivers onto said diskless computer to cause subsequent requests for disk access to be redirected over a bus to said second computer.

10 9. The method of claim 8 further comprising the step installing plural diskless computers within a cabinet to communicate over a common bus, and reserving a portion of said storage medium for each of said diskless computers.

10. The method of claim 8 further comprising reserving a portion of said physical storage medium for each of a plurality of client computer systems.

15 11. The method of claim 8 wherein said second computer and said diskless computer operate using different operating systems.

12. The method of claim 8 wherein said second computer and said diskless computer operate using a common operating system.

20 13. A computer system comprising a plurality of diskless computers and a physical storage medium, the physical storage medium being logically divided into plural sections, each section corresponding to a separate one of said diskless computers, each storage section having an operating system loader and an operating system stored thereon, and wherein each diskless

computer is configured such that upon boot up, the operating system loader from a section corresponding to said diskless computer is first loaded, then the operating system so corresponding is loaded, and wherein said operating system includes drivers for directing disk access requests to and from said physical storage medium.

5 14. The computer system of claim 13 wherein said diskless computers communicate over a network, and wherein at least one of said diskless computers communicates with a peripheral device over a computer bus, and wherein said computer bus and said network utilize the same physical transmission medium.

10 15. The computer system of claim 14 wherein the computer bus and the network utilize different communications protocols.

16. A method of booting a series of computers from at least one operating system located on a storage medium, the method comprising:

organizing the computers into a hierarchy having a plurality of levels;

booting the computers in each level before booting the computers in another level
15 immediately subsequent to said each level.

17. The method of claim 16 wherein the levels include a first level that comprises only one computer.

18. The method of claim 17 wherein, said booting step comprises first loading an operating system loader, and then loading an operating system.

20 19. The method of claim 18 wherein each level has less computers than the immediate subsequent level.